



PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Applicant: Comaniciu (et al)

Serial No.: 10/770,044

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Title: Real-Time Obstacle Detection with a Calibrated

Camera and Known Ego-Motion

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## **CERTIFICATE OF MAILING**

I hereby certify that correspondence is being deposited on Sept. 21, 2004 with the U.S. Postal Service with sufficient postage as first class mail on the below-indicated date in an envelope addressed to: Assistant Commissioner for Patents, Alexandria, VA 22313-1450

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## INFORMATION DISCLOSURE STATEMENT

Sir:

The documents listed on the accompanying Form PTO-1449, and of which copies are enclosed, are hereby cited pursuant to 37 CFR §1.56, §1.97 and §1.98, for consideration in the examination of the above-identified application and for the purpose of having them made of record. These documents were cited in an International Search Report for a corresponding application. A copy of the Search Report is enclosed.

Respectfully submitted,

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Enclosure:

VR

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U.S. Department of Commerce Serial No. Attv. Docket No. Patent and Trademark Office 10/770,044 2003P01633 US01 Applicant INFORMATION CITED BY APPLICANT Dorin Comaniciu Group Filling Date (Use several sheets if necessary) 2613 02.02.04 **U.S. Patent Documents** Filling Date Examiner if appropriate Class Subclass Name Date Initial Document Number 104 382 6445809 9/3/2002 Sasaki et al Foreign Patent Documents Class Subclass Translation Date Country Document Number EP1361543 | 11/12/2003 Other Prior Art (including Author, Title, Date, Pertinent Pages, etc.) ENKELMANN W: "OBSTACLE DETECTION BY EVALUATION OF OPTICAL FLOW FIELDS FROM IMAGE SEQUENCES" IMAGE AND VISION COMPUTING, GUILDFORD, GB, vol. 9, no. 3, June XP009033182 ISSN: 0262—8856 the whole document 1991 (1991—06), pages 160—168, KRUGER W ET AL: "Real-time estimation and tracking of optical flow vectors for obstacle detection" INTELLIGENT VEHICLES '95 SYMPOSIUM. PROCEEDINGS OF THE DETROIT, MI, USA 25-26 SEPT. 1995, NEW YORK, NY, USA, IEEE, US, 25 September 1995 (1995—09—25), pages 304—309, XP010194134 ISBN: 0-7803-2983-X the whole document ATTOLICO G ET AL: "Shape recovery of collision zones for obstacle avoidance" INTELLIGENT ROBOTS AND SYSTEMS '91. 'INTELLIGENCE FOR MECHANICAL SYSTEMS, PROCEEDINGS IROS '91. IEEE/RSJ INTERNATIONAL WORKSHOP ON OSAKA, JAPAN 3—5 NOV. 1991, NEW YORK, NY, USA, IEEE, US, 3 November 1991 (1991—11—03), pages 837—841. XP010047248 ISBN: 0-7803-0067-X the whole document HUZET AL: "Tracking cycle: a new concept for simultaneous tracking of multiple moving objects in a typical traffic scene INTELLIGENT VEHICLES SYMPOSIUM, 2000. IV 2000. PROCEEDINGS OF THE IEEE DEARBORN, MI, USA 3-5 OCT. 2000, PISCATAWAY, NJ, USA,IEEE, US, 3 October 2000 (2000—10—03), pages 233—239, XP010528942 ISBN: 0—7803— 6363-9 the whole document THOMANEK F ET AL: "Obstacle Detection, Tracking And State Estimation For Autonomous Road Vehicle Guidance PROCEEDINGS OF THE IEEE/RSJ INTERNATIONAL CONFERENCE ON INTELLIGENT ROBOTS AND SYSTEMS. RALEIGH, NC., JULY 7 - 10, 1992, NEW YORK, IEEE, US, vol. VOL. 1 - 7 July 1992 (1992-07-07), pages 1399-1406, XP010223197 ISBN: 0-7803-0738-0 page 1401, column 2 page 1403, column 1 SANTOS—VICTOR J ET AL: "On the design of visual behaviors for autonomous systems "INDUSTRIAL ELECTRONICS, 1997. ISIE '97., PROCEEDINGS OF THE IEEE INTERNATIONAL SYMPOSIUM ON GUIMARAES, PORTUGAL 7-11 JULY 1997, NEW YORK, NY, USA,IEEE, US, 7 July 1997 (1997-07-07), pages SS53-SS59, XP010265139 ISBN: 0-7803-3936-3 page SS53, column 1 page SS55, column 2 **Date Considered** Examiner